## ABSTRACT OF THE DISCLOSURE

A method for performing cell broadcasting and a communication system using the same are provided. The method includes steps of receiving in a mobile station at least one data unit of a short message service cell broadcasting (SMSCB) message broadcast from at least one cell of a communication system; and reading the SMSCB message based on the schedule message, wherein the schedule message is comprised of a plurality of fields for informing the mobile station of a location of the SMSCB message, a length of a schedule period, and whether a new SMSCB message has been broadcast. The schedule message also includes a field for informing the mobile station of a location of a next schedule message, a field for informing the mobile station of at least one of a start frame and an end frame of the schedule period, and a media access control (MAC) header made up of first and second fields, the first field indicating whether the at least one data unit is to be mapped to one of a common logical channel of the MAC layer or a dedicated logical channel of the MAC layer and the second field indicating whether the at least one data unit is to be mapped to one of a common control channel of the MAC layer or a common traffic channel of the MAC layer. The communication system realizes the SMS cell broadcasting through a UTRAN-MAC-c entity for performing steps of scheduling, multiplexing, and transmitting, and a UE-MAC-c entity for performing steps of receiving, demultiplexing, and reading.

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